

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An arrangement for determining positions of the teats of a milking animal in a milking system comprising a robot arm for automatically attaching teat cups to the teats of a milking animal when being located in a position to be milked, and a control device for controlling the movement of said robot arm based on determined positions of the teats of the milking animal, said arrangement comprising:

- a first camera pair directed towards the teats of the milking animal when being located in the position to be milked', wherein the first camera pair is provided to repeatedly record pairs of images;
- an image processing device provided for repeatedly detecting the teats of the milking animal and determining their positions by a stereoscopic calculation method based on said repeatedly recorded pairs of images, wherein
- said image processing device is provided in an initial stage to determine the absolute position of a teat of the milking animal in a coordinate system of the milking system; and
- said image processing device is provided, in a later stage when the robot arm is close to attach a teat cup to the teat of the milking animal, to repeatedly determine the position of the teat of the milking animal relative to the robot arm or the teat cup, wherein
- said the position of the teat of the milking animal relative to the robot arm or the teat cup is more exact than said absolute position.

2-82. (Cancelled)